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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

EL HADY, NABIL M

ART UNIT PAPER NUMBER

2152

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/717,262

Applicant(s)

SHIMADA ET AL.

Examiner

Nabil M. El-Hady

Art Unit

2
2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/22/2000.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. Claims 1-15 are pending in this application. Claim 6 is cancelled. Claims 1-4, 7, and 10-11 are amended. Claims 12-15 are added as new claims. Now claims 1-5 and 7-15 are presented for examination.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-5 and 7-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The following words or phrases are not clearly understood rendering the claim vague or indefinite:

a) "based on a channel type that indicates properties of a channel that generates said process requests", claim 1, lines 6-7. It is unclear which function, the accepting function or the determining function, of the process request determination means is based on the channel type. Examiner understanding from the specifications, page 16, is that, for example, "telephone forwarding" and "web forwarding" requests which normally use different channel types are both determined to be real-time requests. Accordingly, the determination function can not be based on the type of channel and only the accepting function may be based on the type of channel. This is unclear in the claim as cited.

b) "processing terminals currently open among channels capable of said real-time process", claim 1, lines 9-10, claim 2, lines 7-8, claim 8, lines 7-8, and claim 9, lines 7-8 . The use of "channel" here is unclear, especially its relation to "the plurality of channels as communication means between a user and call center" cited in the same claim. Examiner interprets that as process requests are allocated to processing terminals currently available among a plurality of processing terminals capable of processing said real-time process. This is unclear in the claim as cited.

c) "determining whether process requests are real-time process requests" claim 2, lines 3-4, and "determining whether said process request is a real-time process request", claim 2, lines 6-7. It is unclear because it appears that the second limitation is already covered by the first limitation.

d) "determining whether process requests are real-time process requests, or non-real-time process requests" claim 2, lines 3-4, and "determining whether said process request is a non-real-time process request", claim 2, lines 9-10. It is unclear because it appears that the second limitation is already covered by the first limitation.

e) "suitability of open processing terminals", claim 3, line 4; "processing terminal is kept open", claim 5, lines 2-3, claim 12, line 2, claim 13, line 2, claim 14, line 2, and claim 15, line 2; "processing terminals currently open", claim 8, line 7, and claim 9, line 7. It is unclear what "open means". It is interpreted by the examiner as available.

B. The following terms lack antecedent basis:

Art Unit: 2154

a) "said process request", claim 2, line 6 and line 9;

b) "the priority level", claim 3, line 3;

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 4, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Haigh (5,793,861).

6. Haigh is cited by the examiner in a previous office action.

7. As per claim 4, Haigh discloses the invention as claimed including a multi-channel processing control method (Fig. 2) for processing terminals (106, Fig. 7) handled by operators processing incoming tasks and processing terminals handled by operators processing outgoing tasks (AGENT STATION 34, Fig. 1, 104, 106, Fig. 7; and col. 6, lines 4-7), at least one of the operators being a dual-duty operator capable of processing either incoming tasks or outgoing tasks (col. 6, lines 6-9), comprising: allocating the processing terminal handled by said dual-duty operator to either incoming or outgoing tasks based on a current status of the processing terminals handled by the operators (col. 6, line 6-19, 20-38); wherein said incoming tasks and outgoing tasks include process requests arising from channels (col. 2, lines 2-9; Fig. 1; and col. 5, lines 31-37) including, in addition to the processing terminals handled by said operators, Web

Art Unit: 2154

agent handling process requests generated by Internet web servers (col. 3, lines 54-57; and col. 7, lines 18-21), e-mail agents handling process requests generated by e-mail servers (col. 3, lines 57-58; and col. 7, lines 22-23); and automatic voice response devices automatically processing incoming signals from public lines (col. 3, lines 22-39; and Fig. 7).

8. As claim 10, the claim is rejected for the same reasons as claim 4 above. In addition, a recording medium on which is recorded a program for a multi-channel control performing the method of claim 4 is inherent in Haigh's disclosure.

9. As per claim 11, the claim is rejected for the same reasons as claims 4 and 10 above. In addition, a transmission medium transmitting a program for a multi-channel control performing the method of claim 4 is inherent in Haigh's disclosure.

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-3, 5, 7-9, and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haigh (US 5,793,861) in view of Naoki et al. (JP 07-030946), hereinafter "Naoki".

12. Naoki is cited by the applicant in IDS paper filed March 7, 2003.

Art Unit: 2154

13. As per claim 1, Haigh discloses the invention substantially as claimed including a multi-channel processing control device (12, Fig. 1), comprising: process request determination means (Transaction Controller 18, Fig. 1) for determining the type of process requests from a plurality of channels (col. 2, lines 2-9; Fig. 1; and col. 5, lines 31-37); processing allocation means for allocating process requests (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4) to processing terminals currently open among channels (col. 4, line 52 to col. 5, line 19; col. 5, lines 65-67; col. 6, lines 39-48), administrating means for administrating process requests (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4), as well as priority levels therefor (col. 2, lines 26-32; and col. 7, lines 33-39); and allocation means for allocating to any of the processing terminals (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4), said allocation performed with consideration given to the priority level and to suitability of the terminal for handling the process (col. 2, lines 27-40; col. 4, lines 52-55; and col. 7, lines 33-39).

14. Haigh does not necessarily designate process requests as real-time or non-real-time requests. Haigh discloses the main features of the claimed invention of receiving process requests from different channels, identifying them, queuing them, allocating them to appropriate and available processing terminals and agents. Haigh, in one embodiment, identifies the type of process requests with the channel types (col. 2, lines 61-65), in another embodiment, identifies the type of the process requests with a time stamp, a counter, or other means (col. 3, lines 12-21). The concept of identification / classification / or determination of the type of process requests is essential in Haigh's disclosure in order to perform the process of queuing and allocation of process requests to appropriate and available processing terminals (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4). It would have been obvious to one skilled in the art at the time of the invention that such concept of identification or determination of the type of

process requests, which is proved to be essential to the whole process, may be based on a wide parameters including identifying them as real-time process requests, non-real-time process requests. Such identification or classification is clearly obvious in the prior art. So, as Haigh does not necessarily designate process requests as real-time or non-real-time requests, others in the prior art do, e.g. Naoki et al. do. Naoki et al. discloses that a determination of process requests as real-time and non-real-time may be performed to identify or classify the requests. It would have been obvious to one skilled in the art at the time of the invention to modify the teachings of Haigh with that of Naoki et al. Using Naoki et al. determination of process requests as real-time and non-real-time would highly enhance the performance of Haigh's system with the obvious motivation of granting and executing real-time requests with higher level of priority (see, Naoki et al's abstract).

15. Haigh may not explicitly disclose separate allocating, and administrative and allocating means for different classifications of process requests. However, he discloses request processing system (12, Fig. 1) with administrating and allocating functions (48, Fig. 2) through request controller (18, Fig. 1) with selective processing of requests in the queue (col. 2, lines 31-32). The request controller queues the request in at least one queue 16, the queue may include a plurality of classes or may include a plurality of types of queues (col. 2, lines 33-39). Modifying Haigh's teachings with Naoki et al.'s would mean producing real-time and non-real-time request queues handles by corresponding administrative and allocating means.

16. As per claim 2, the claim is rejected for the same reasons as claim 1 above. In addition, Haigh discloses a multi-channel processing control method (Fig. 2), comprising: determining the type of process requests (col. 2, lines 2-9; Fig. 1; and col. 5, lines 31-37); allocating

Art Unit: 2154

different types of process requests (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4) to processing terminals currently open among channels (col. 4, line 52 to col. 5, line 19; col. 5, lines 65-67; col. 6, lines 39-48) capable of processing each type, and administrating process requests (col. 2, lines 24-39; and col. 4, line 52 to col. 5, line 4) as well as priority levels therefor (e.g. col. 2, lines 27-35).

17. As to claim 3, Haigh discloses allocating process request currently being administrated to a most appropriate processing terminal, based on the priority level of the request and suitability of open processing terminals capable of processing said request (col. 4, line 52 to col. 5, line 4; col. 5, lines 47-54; and col. 6, lines 20-24).

18. As per claims 5, and 12-15, Haigh discloses among the processing terminals handled by said operators, at least one processing terminal is kept open for real-time incoming tasks (col. 6, lines 20-24)..

19. As to claim 7, Haigh discloses said outgoing tasks include preplanned non-real process requests not requiring real-time processing (col. 7, lines 33-39).

20. As claim 8, the claim is rejected for the same reasons as claims 1 and 2 above. In addition, a recording medium on which is recorded a program for a multi-channel control performing the method of claim2 is inherent in Haigh and Noaki's disclosure.

Art Unit: 2154

21. As per claim 9, the claim is rejected for the same reasons as claims 1, 2, and 8 above. In addition, a transmission medium transmitting a program for a multi-channel control performing the method of claim 2 is inherent in Haigh and Noaki's disclosure.

22. Applicant's arguments filed 7/29/2004 have been fully considered but they are not persuasive.

23. In the remarks, applicants argued in substance that (1), Haigh does not teach determination means for determining whether process requests are real-time or non-real-time, (2), Haigh does not teach allocation among capable channels, (3), Haigh does not teach administering priority levels, (4), Haigh does not teach about suitability of a terminal for handling the process, and (5) Haigh does not teach accepting a process request.

24. Examiner respectfully traverses applicants' remarks.

25. As to point (1), Haigh teachings modified with Noaki's teaching as explained above clearly teach determination means for determining whether process requests are real-time or non-real-time.

26. As to point (2), Haigh clearly disclose allocation among capable channels (col. 5, line 65 to col. 6, line 4). Next available agent capable of receiving specific type of process requests means allocation of process requests. It is obvious that special agents are designated to special processing terminals.

Art Unit: 2154

27. As to point (30) Haigh does teach administrating priority levels (col. 2, lines 27-40; col. 4, lines 52-55; and col. 7, lines 33-39). The default FIFO order is part of administrating a priority level system that may be modified by the supervisor. Also other known queue processing techniques may be used such as LIFO, which is also part of administrating a priority level system. Selective processing is also a part of administrating a priority level system. Priority levels are also assigned for follow-up call and/or appointment (col. 7, lines 33-39).

28. As to point (4), Haigh does teach about suitability of a terminal for handling the process (col. 5, line 65 to col. 6, line 4). Available agent capable of receiving specific type of process requests means allocation of process requests. It is obvious that special agents are designated to special processing terminals.

29. As to point (5), In Haigh, process requests are accepted by the process request "transaction" processing system 12 of Fig. 1 which operates as multi-channel ACD system (col. 2, lines 40-57).

30. Applicant's amendment changed the scope of the claims and necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 2154

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M. El-Hady whose telephone number is (571) 272-3963. The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 18, 2005



Nabil El-Hady, Ph.D, M.B.A.
Primary Patent Examiner
Art Unit 2154